## IN THE CLAIMS

Please amend the claims as follows:

1. (Currently Amended) In a data processing system having including a plurality of processors each directly coupled via a system memory bus and having wherein a first processor of said plurality of processors with contains a level one cache memory responsively directly coupled to a level two cache memory which is responsively directly coupled to a level three memory, said level two cache memory having containing cache storage and tag storage and having containing a circuit for SNOOPing said system memory bus, the improvement comprising:

A first dedicated path between said system memory bus and said cache storage and a second dedicated path between said system memory bus and said tag storage.

2. (Currently Amended) A data processing system according to claim 1 further comprising control logic responsively directly coupled to said cache storage and said tag storage which provides the highest priority for said SNOOPing.

- 3. (Previously Amended) A data processing system according to claim 2 wherein said level two cache memory further comprises:

  A duplicate tag memory.
- 4. (Previously Amended) A data processing system according to claim 3 wherein said plurality of processors further comprises A plurality of instruction processors.
- 5. (Previously Amended) A data processing system according to claim 4 wherein said level three memory further comprises:

A level three cache memory.

- 6. (Currently Amended) A data processing system comprising:
- a. A plurality of processors including a first processor having containing a level one cache memory;
- b. A level two cache memory having containing a data memory and a tag memory responsively directly coupled to said level one cache memory;
- c. A system memory bus responsively directly coupled to said plurality of processors and responsively directly coupled to said data memory and responsively directly coupled to said tag memory; and

- d. A SNOOP request placed on said system memory bus and responsively directly coupled to said tag memory.
- 7. (Previously Amended) A data processing system according to claim 6 further comprising:

A data request transferred from said level one cache memory to said level two cache memory.

8. (Previously Amended) A data processing system according to claim 7 further comprising:

Control logic within said level two cache memory which provides priority of said SNOOP request over said data request.

- 9. (Previously Amended) A data processing system according to claim 8 further comprising:
- a. A level one tag memory located within said level one cache memory; and
- b. A duplicate tag memory within said level two cache memory which maintains a duplicate of information within said level one tag memory.

- 10. (Currently Amended) A data processing system according to claim 9 wherein said SNOOP request is responsively directly coupled to said duplicate tag memory.
- of data within a level one cache memory of a processor having a level one tag memory responsively directly coupled to a level two cache memory having containing a tag memory and a data memory wherein said level two cache memory is responsively directly coupled to a system memory bus comprising:
  - a. Formulating a SNOOP request;
- b. Presenting said SNOOP request on said system memory bus to said level two cache memory;
- c. Routing said SNOOP request directly to said tag memory; and
  - d. Processing said SNOOP request.
- 12. (Original) A method according to claim 11 further comprising:
- a. Presenting a data request from said level one cache memory to said level two cache memory; and
- b. Granting priority to said SNOOP request over said data request.

13. (Previously Amended) A method according to claim 12 further comprising:

Maintaining a duplicate copy of said level one tag memory within a duplicate tag memory within said level two cache memory.

14. (Previously Amended) A method according to claim 13
further comprising:

Routing said SNOOP request to said duplicate tag memory.

15. (Previously Amended) A method according to claim 14 further comprising:

Processing said SNOOP request regarding said duplicate tag memory.

- 16. (Currently Amended) An apparatus comprising:
- a. Means for executing program instructions;
- b. Means responsively directly coupled to said executing means for level one caching data;
- c. Means responsively directly coupled to said executing means and said level one caching means for requesting a data element if said executing means requires requesting of said data element and said level one caching means does not contain said data element;

- d. Means responsively directly coupled to said requesting means for level two caching;
- e. Means located within said level two caching means for storing level two caching data;
- f. Means located within said level two caching means for maintaining level two tags; and
- g. Means responsively directly coupled to said maintaining means for directly SNOOPing said level two tags.
- 17. (Currently Amended) An apparatus according to claim 16 further comprising:
- a. Means responsively directly coupled to said storing means and said maintaining means for granting priority to a SNOOP request over said data element request.
- 18. (Currently Amended) An apparatus according to claim 17 further comprising:
- a. Means responsively <u>directly</u> coupled to said level two caching means for bussing system memory data;
- b. Means responsively directly coupled to said bussing means for interfacing said bussing means directly to said storing means; and

- c. Means responsively <u>directly</u> coupled to said bussing means for interfacing said bussing means directly to said maintaining means.
- 19. (Currently Amended) An apparatus according to claim 18 further comprising:
- a. Means located within said level one caching means for recording level one tags; and
- b. Means located within said level two caching means and responsively directly coupled to said recording means for duplicating said level one tags.
- 20. (Currently Amended) An apparatus according to claim 16 further comprising:
- a. Means responsively directly coupled to said bussing means and said duplicating means for SNOOPing said duplicating means.